## What is Claimed:

- Apparatus for analysis of a biological specimen, comprising:
   a biological specimen carrier; and
- a read/write data storage device attached to the carrier, wherein data related to an analysis of a biological specimen carried in the carrier may be stored in, and retrieved from, the data storage device.
- 10 2. The apparatus of claim 1, the biological specimen comprising a cytological specimen.
  - 3. The apparatus of claim 1, the biological specimen carrier comprising a slide.

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- 4. The apparatus of claim 1, the biological specimen carrier comprising a vial.
- 5. The apparatus of claim 1, the data storage device comprising 20 a radio frequency identification device.
  - 6. The apparatus of claim 1, the data storage device comprising a magnetic storage device.
- 25 7. The apparatus of claim 1, the data storage device comprising an optical storage device.
- 8. The apparatus of claim 1, wherein the data related to the analysis of the biological specimen is an identifier, a timestamp, coordinates of a field of interest, or coordinates of a marked target zone.

- 9. A system for analyzing a biological specimen, comprising: a biological specimen carrier;
- an imaging device configured to obtain images of a biological specimen carried in the carrier;
  - a processor implemented program for analyzing images of the specimen obtained by the imaging device and for identifying objects in the specimen from the images;
- a microscope for viewing objects in the specimen identified 10 by the processor implemented program; and
  - a read/write data storage device attached to the biological specimen carrier,

wherein data related to an analysis of the specimen may be stored in, and retrieved from, the data storage device.

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- 10. The system of claim 9, the biological specimen comprising a cytological specimen.
- 11. The system of claim 9, the biological specimen carrier 20 comprising a slide.
  - 12. The system of claim 9, the biological specimen carrier comprising a vial.
- 25 13. The system of claim 9, the data storage device comprising a radio frequency identification device.
  - 14. The system of claim 9, the data storage device comprising a magnetic storage device.

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15. The system of claim 9, the data storage device comprising an optical storage medium.

- 16. The system of claim 9, the data comprising slide coordinates of locations of identified objects in the specimen.
- 17. The system of claim 9, wherein the data related to the analysis of the specimen is an identifier, a timestamp, coordinates of a field of interest, or coordinates of a marked target zone.
- 18. A method for analyzing a biological specimen, comprising:

  10 providing a biological specimen in a specimen carrier; and

  storing data related to the analysis of the specimen in a

  read/write data storage device attached to the specimen carrier.
- obtaining images of the biological specimen; and analyzing the images with a processor implemented program, wherein the stored data comprises locations of objects of interest in the specimen that were identified by the image analysis.
  - 20. The method of claim 18, the data storage device comprising a radio frequency identification device.

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